[4910-13-P]

### **DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2013-0557; Directorate Identifier 2013-NE-22-AD; Amendment 39-17679; AD 2013-24-05]

RIN 2120-AA64

Airworthiness Directives; Turbomeca S.A. Turboshaft Engines

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Turbomeca S.A. Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S, and 1S1 turboshaft engines. This AD requires a one-time inspection of the free turbine (FT) module (M04) for the affected Turbomeca S.A. Arriel 1 engines and, if a discrepancy is found, repair of the affected module. This AD was prompted by a "chip illumination event" in flight on a Turbomeca S.A. Arriel 1 engine. We are issuing this AD to prevent a loss of FT bearing lubrication, resulting in FT module failure, damage to the engine, and damage to the aircraft.

**DATES:** This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: The Docket Operations office is located at Docket Management Facility,

U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <a href="http://www.regulations.gov">http://www.regulations.gov</a>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (phone: 800-647-5527) is provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Robert Morlath, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7154; fax: 781-238-7199; email: robert.c.morlath@faa.gov.

#### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to the specified products. The NPRM was published in the *Federal Register* on August 12, 2013 (78 FR 48824). The NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

A "chip light illumination" event in flight on an ARRIEL 1C2 engine was reported to Turbomeca. Following the event, which resulted from Free Turbine front bearing deterioration, the investigation revealed that the loss of the Free Turbine (FT) bearing module has led to a major disruption in the lubrication of

the FT module (M04) bearings. The root cause of the event has been attributed to incorrect bonding of the Free Turbine Bearing Plug, accomplished during the repair process in an identified Repair Center. Consequently, it was possible to identify a batch of Modules M04 which are potentially affected.

You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov/#!documentDetail;D=FAA-2013-0557-0002.

### Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (78 FR 48824, August 12, 2013).

#### Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting this AD as proposed.

## **Costs of Compliance**

We estimate that this AD will affect about 5 engines of U.S. registry. We also estimate that it will take about 1 hour per product to comply with this AD. The average labor rate is \$85 per hour. Required parts will cost about \$13 per engine. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$1,765.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

# **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

## List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

# § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2013-24-05 **Turbomeca S.A.:** Amendment 39-17679; Docket No. FAA-2013-0557; Directorate Identifier 2013-NE-22-AD.

### (a) Effective Date

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

## (b) Affected ADs

None.

# (c) Applicability

This AD applies to Turbomeca S.A. Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S, and 1S1 turboshaft engines equipped with free turbine (FT) module (M04) identified by the part and serial numbers listed in Figure 2 of Turbomeca S.A. Alert Mandatory Service Bulletin (MSB) No. A292 72 0838, Version A, dated May 24, 2013.

### (d) Reason

This AD was prompted by a "chip illumination event" in flight on a Turbomeca S.A. Arriel 1 engine. We are issuing this AD to prevent a loss of FT bearing lubrication, resulting in FT module failure, damage to the engine, and damage to the aircraft.

## (e) Actions and Compliance

Comply with this AD within the compliance times specified, unless already done.

- (1) For Arriel 1B, 1D, and 1D1 engines with an FT module (M04) with a part and serial number listed in Figure 2 of Turbomeca S.A. Alert MSB No. A292 72 0838, Version A, dated May 24, 2013, within 50 flight hours (FHs) from the effective date of this AD, inspect the FT module (M04). Use the instructions in paragraph 6 of Turbomeca S.A. Alert MSB No. A292 72 0838, Version A, dated May 24, 2013 to do the inspection.
- (2) For Arriel 1A1, 1A2, 1C, 1C1, 1C2, 1E2, 1K1, 1S, and 1S1 engines with an FT module (M04) with a part and serial number listed in Figure 2 of Turbomeca S.A. Alert MSB No. A292 72 0838, Version A, dated May 24, 2013, within 300 FHs from the effective date of this AD, inspect the FT module (M04). Use the instructions in paragraph 6 of Turbomeca S.A. Alert MSB No. A292 72 0838, Version A, dated May 24, 2013, to do the inspection.
- (3) If you find that the FT module (M04) is not eligible for return to service, remove the FT module (M04) before further flight.

### (f) Installation Prohibition

After the effective date of this AD, do not install any affected FT module (M04) with a part and serial number listed in Figure 2 of Turbomeca S.A. Alert MSB No. A292 72 0838, Version A, dated May 24, 2013, onto any engine, or an engine with an affected

FT module (M04) onto any helicopter, unless the module has passed the inspections required by paragraphs (e)(1) and (e)(2) of this AD.

# (g) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

## (h) Related Information

- (1) For more information about this AD, contact Robert Morlath, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7154; fax: 781-238-7199; email: <a href="mailto:robert.c.morlath@faa.gov">robert.c.morlath@faa.gov</a>.
- (2) Refer to MCAI European Aviation Safety Agency AD 2013-0120, dated June 4, 2013, for more information. You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov/#!documentDetail;D=FAA-2013-0557-0002.

## (i) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.
- (i) Turbomeca S.A. Alert Mandatory Service Bulletin No. A292 72 0838, Version A, dated May 24, 2013.
  - (ii) Reserved.

(3) For Turbomeca service information identified in this AD, contact Turbomeca,

S.A., 40220 Tarnos, France; phone: 33 (0)5 59 74 40 00; telex: 570 042; fax: 33 (0)5 59

74 45 15.

(4) You may view this service information at FAA, Engine & Propeller

Directorate, 12 New England Executive Park, Burlington, MA. For information on the

availability of this material at the FAA, call 781-238-7125.

(5) You may view this service information at the National Archives and Records

Administration (NARA). For information on the availability of this material at NARA,

call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-

locations.html.

Issued in Burlington, Massachusetts, on November 14, 2013.

Colleen M. D'Alessandro,

Assistant Directorate Manager, Engine & Propeller Directorate,

Aircraft Certification Service.

[FR Doc. 2013-30459 Filed 12/23/2013 at 8:45 am; Publication Date: 12/24/2013]

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